



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,437	12/23/2003	Hiroto Sasaki	Q78963	8137
23373	7590	04/18/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			CLEVELAND, MICHAEL B	
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/743,437

Applicant(s)

SASAKI ET AL.

Examiner

Michael Cleveland

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2006.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) 14-19 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-13 and 20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group 1, claims 1-13 and 20 in the reply filed on 1/31/2006 is acknowledged.
2. Claims 14-19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 1/31/2006.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 12, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Postupack (U.S. Patent 4,845,310, hereafter '310).

'310 teaches a method for producing a light-transmitting electromagnetic wave-shielding film having a metal grid (i.e., a conductive metal portion) to provide electromagnetic wave shielding to transparent aircraft parts (col. 2, lines 57-68). Therefore, the grid must comprise light-transmitting portions. The method comprises exposing and developing a silver salt-containing layer containing a silver salt and provided on a plate (i.e., support) to form a metal silver portion in the exposed portion and the light-transmitting portion in the unexposed portion (col. 5, lines 11-20) and further subjecting the metal silver portion to plating to form the conductive metal portion consisting of the metal silver portion carrying conductive metal particles, such as electrolytic plating using a copper sulfate solution (col. 5, lines 45-51). Such plating coats the underlying layer with conductive metal particles, as disclosed by applicant at p. 34.

Claim 2: The salt may be silver halide (col. 5, lines 16-19).

Claim 12: The developed areas are removed. Therefore, they do not contain physical development nuclei.

Art Unit: 1762

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 3, 6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Postupack '310 in view of Poot et al. (U.S. Patent 3,989,522, hereafter '522).

'310 is discussed above, but does not state that the silver halide is silver bromide nor that the developing solution is a lith developer. However, the Examiner takes Official Notice that silver bromide is a notoriously well-known silver halide salt for exposure and development and that lith developers are well known developers for such compositions. See, e.g., '522, col. 5, lines 57-67. The selection of something based on its known suitability for its intended use has been held to support a *prima facie* case of obviousness. *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used silver bromide as the particular silver halide salt and a lith developer as the particular developing composition with a reasonable expectation of success because they are well known as a suitable silver halide salt and developing solutions.

Claim 6: '522 teaches further known features of silver halide compositions include Ag/binder ratios of 10/6 (col. 7, lines 66-col. 8, line 2).

Art Unit: 1762

8. Claims 4-5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Postupack '310 in view of Habu et al. (U.S. Patent 4,160,669, hereafter '669).

'310 is discussed above, but does not state that the silver halide contains palladium metal or rhodium or iridium compounds. However, '669 teaches that such additives in silver halide compositions shorten the necessary exposure time (col. 5, line 61-col. 6, line 21). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the palladium metal or rhodium or iridium compounds of '669 in the silver halide composition of '310 with a reasonable expectation of success in order to have shortened the necessary exposure time.

Claim 7: '669 also teaches a silver halide grain size of about 100 nm (col. 5, lines 57-60).

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Postupack '310 in view of Monroe (U.S. Patent 4,362,796, hereafter '796).

'310 is discussed above, but does not explicitly state that more than half of the silver halide is converted to colloidal silver. However, '310 makes no indication that less than complete conversion is desired, and it is understood in the art that the amount of conversion is a function of the amount of energy applied ('796, col. 4, lines 40-50). Therefore, the degree of conversion affects the amount of energy applied and/or time of application to the photoemulsion. It has been held that the discovery of the optimum value of a result effective variable in a known process is ordinarily within the skill in the art. *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have optimized the process for the optimum combination of desired conversion to expense and time of energy application.

10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Postupack '310 in view of Portner (U.S. Patent 5,288,313, hereafter '313).

'310 is discussed above, but does not explicitly state that the copper plating is electroless plating. However, '313 teaches that silver surfaces are known to activate substrates for

Art Unit: 1762

electroless deposition of further metal (col. 4, lines 46-59; col. 7, lines 18-55), such as copper (col. 11, lines 5-18) to form electromagnetic shielding. The selection of something based on its known suitability for its intended use has been held to support a *prima facie* case of obviousness. *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used electroless plating instead of electroplating to have formed the copper of '310 with a reasonable expectation of success because '313 teaches that electroless plating is a suitable method of depositing copper onto silver particles to form electromagnetic shielding.

11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Postupack '310 in view of Hasegawa (U.S. Patent 4,631,214, hereafter '214).

'310 is discussed above, but does not explicitly state that the electromagnetic shield is blackened after formation. However, '214 teaches that it is advantageous in forming metal grid as electromagnetic shields for transparent parts should be blackened in order to prevent reflections. (col. 5, lines 3-32). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have blackened the conductive metal portion of '310 in order to have reduced reflection in the transparent electromagnetic shield.

12. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Postupack '310 in view of Chaussade et al. (U.S. Patent 6,787,204, hereafter '204) and Mueller et al. (U.S. Patent 4,831,491, hereafter '491)

'310 is discussed above, but is silent as to the surface resistance and transmittance of the aircraft window. However, '204 teaches that the surface resistance of electromagnetically shielded aircraft window should be 2-40 ohm/square (col. 2, lines 20-29), and '491 teaches that the transmittance of aircraft windows should be greater than 70% (col. 1, lines 53-66). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have chosen the surface resistance and transmittance of the from the disclosed suitable ranges for electromagnetically shielded aircraft windows. The subject matter as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because


Art Unit: 1762

overlapping ranges have been held to be a *prima facie* case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Cleveland whose telephone number is (571) 272-1418. The examiner can normally be reached on Monday-Thursday, 7-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Michael Cleveland
Primary Examiner
Art Unit 1762

4/16/2005